REMARKS/ARGUMENTS

Claims 1-24, 34, 44, 46, and 48-66 are cancelled.

Support for each amended claim is found at the originally filed claims and throughout the originally filed specification. Additionally, support for the term "metal particles" of present Claims 25, 33, and 35-40 is found, for example, at page 4, lines 13-14, of the originally filed specification. Support for the phrase "subnanometer" of present Claims 25 and 40 is found, for example, at page 4, line 25, of the originally filed specification, and at Fig. 2, and Example 3, page 16 of the originally filed specification.

No new matter is believed to have been added.

Applicants thank Examiner Naff for the helpful and courteous interview of February 7, 2008, wherein possible amendments to the claims to address the rejections of record were discussed.

The written description rejection of Claims 25-43, 45 and 47 is believed to be obviated by claim amendments and cancellations. The rejection of Claim 34 is obviated by cancellation of Claim 34. The phrase "at least one metal nanoparticle" has been removed from present Claims 25 and 34-40. The phrase "more than one metal nanoparticle" has been removed from present Claim 41. Withdrawal of the rejection is respectfully requested.

The obviousness rejection of Claims 25-31, 33-43, 45 and 47 as being unpatentable in view of Pompe, Singh and Richter is respectfully traversed, because the references, alone or in combination, are not enabled for all of the elements of, for example, present Claims 25 and 40, and the combination of the references cannot therefore constitute a proper obviousness rejection.

Present Claims 25 and 40 contain the feature "wherein the metal particles in the metal particle nucleic acid composite are subnanometer in size." Applicants respectfully submit that the term subnanometer is a term of art, and that subnanometer describes something

smaller than 1 nanometer in size. In support, Applicants have submitted, along with this paper, several published documents. The documents bracket the application filing date (e.g., are before and after the application was filed in the Patent Office) to show that the term of art "subnanometer" was, both before and after the filing date of the application, known to describe an article smaller than 1 nanometer in size.

The first document, *Langmuir*, 2000, 16, 4016-4023, describes, in the Abstract, that "...clusters having a diameter of 0.3-0.6 nm are obtained within 30 minutes. The coverage of the...surface by these *subnanometer* silver clusters..."

The second document, J. Phys. Chem. B 2002, 106, 9979-9981, describes in part, in the Abstract, that "...thiol stabilized gold particles with *subnanometer* core diameters (dcore = 0.8 ± 0.2 nm)..."

The third document, *Nano Lett.* paper, (Yang, Y; Chen, S.; *Nano Lett.* 3, 75-79 (2003), describes, in part, in the first column, at page 75, left side that "In these previous studies, the gold particles were synthesized by the Brust reaction, with the core diameter readily varied within the range of 1 to 5 nm. It can be anticipate that for smaller (i.e., *subnmanometer-sized*) gold particles..."

The fourth document, *J. Am. Chem. Soc.*, 127, 2125-2135 (2005), describes, in part, in the Abstract, that "*Subnanometer* Pd clusters stabilized with micelles of random copolymers were formed by direct immobilization of Pd(0)...The cluster were estimated to contain approximately seven Pd atoms on average (cluster diameter [approximately equal to] 0.7 nm)."

Thus, documents from both before and after the filing date of the application, from peer reviewed journals, show that "subnanometer" is a term of art that refers to an article less than 1 nm in size.

Additionally, the several U.S. patents have been provided that employ the term "subnanometer," further reinforcing that "subnanometer" is a term of art.

Having established that subnanometer means less than 1 nanometer in size, Applicants submit the references are not enabled for the feature of present Claims 1 and 40 "wherein the metal particles in the metal particle nucleic acid composite are subnanometer in size." Pompe, at page 1090, left column, final paragraph, describes that "the described procedure leads to formation of clusters with a diameter of 3 to 5 nm on the DNA."

Richter, at page 509, right column, first paragraph, describes "The initially grown metal clusters (3-5 nm) are, for the first time, on the same scale as the diameter of the DNA itself."

The disclosure of Singh does not cure the deficiencies of Pompe and Richter. Because the references, either alone or in combination, are not enabling for a feature of present Claims 25 and 40, and the claims depending thereform, withdrawal of the obviousness rejection is respectfully requested.

The obviousness rejection of Claim 43 as being unpatentable over Pompe, Richter, Singh, and Newsman, is respectfully traversed because, the references, either alone or in combination, are not enabling for the feature of present Claim 43, that "the metal particles in the metal particle nucleic acid composite are subnanometer in size."

Concerning the obviousness type double patenting rejection: Applicants respectfully submit that the claims of US 6,884,587 in combination with Singh do not describe or suggest the all of the features of the present claims and thus, request withdrawal of the rejection. Nevertheless, Applicants respectfully request, should the Office otherwise find the claims to be in condition for allowance, that the Office contact the Applicants to discuss filing of a terminal disclaimer.

Applicants respectfully submit the present application is now in condition for allowance. Early notification to this effect is earnestly solicited.

Respectfully submitted,

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